## **AMENDMENT TO THE CLAIMS:**

Please amend the claims as follows.

1.- 27. (Canceled)

28. (Previously Presented) A method of producing 2-alkyl-4-isothiazoline-3-one represented by the general formula (III),

wherein the compound represented by formula (II),

is reacted with chlorine as a chlorinating agent in dichloromethane as a solvent, in which hydrogen chloride is insoluble or exhibits low solubility, at a temperature of 39-41°C, according the reaction formula represented by:

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wherein R in the compounds of formulae (II) and (III) represents an alkyl group or aralkyl group of C1 to C8, and

wherein the amount of a 5-chloro-2-alkyl-4-isothiazoline-3-one contained in the 2-alkyl-4-isothiazoline-3-one produced is less than 0.1%.

- 29. (Previously Presented) The method producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 28, wherein the R represents a methyl group.
- 30. (Previously Presented) The method producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 28, wherein the R represents a normal octyl group.
- 31. (Previously Presented) The method producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 28, further comprising the steps of filtrating a hydrochloride salt of the compound of formula (III) obtained from the reaction of the compound of formula II with chlorine, and washing the hydrochloride salt with a solvent which is inert to the hydrochloride salt and in which the hydrochloride salt exhibits low solubility.
- 32. (Previously Presented) The method producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 29, further comprising the steps of filtrating a hydrochloride salt of the compound of formula (III) obtained from the reaction of the compound of formula II with chlorine, and washing the hydrochloride salt with a solvent which is inert to the hydrochloride salt and in which the hydrochloride salt exhibits low solubility.
  - 33. (Previously Presented) The method producing a 2-alkyl-4-isothazoline-

3-one as defined in Claim 30, further comprising the steps of filtrating a hydrochloride salt of the compound of formula (III) obtained from the reaction of the compound of formula II with chlorine, and washing the hydrochloride salt with a solvent which is inert to the hydrochloride salt and in which the hydrochloride salt exhibits low solubility.

34. (Previously Presented) An industrial disinfectant composition comprising, as an effective component, a 2-alkyl-4-isothazoline-3-one represented by the formula (III),

which is obtained by reacting the compound represented by formula (II),

with chlorine as a chlorinating agent in dichloromethane as a solvent, in which hydrogen chloride is insoluble or exhibits low solubility, at a temperature of 39-41°C, according the reaction formula represented by:

wherein R in the compounds of formulae (II) and (III) represents an alkyl group or aralkyl group of C1 to C8, and

wherein the amount of a 5-chloro-2-alkyl-4-isothiazoline-3-one contained in the 2-alkyl-4-isothiazoline-3-one produced is less than 0.1%.

- 35. (Currently Amended) The <u>industrial disinfectant composition</u> method producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 34, wherein the R represents a methyl group.
- 36. (Currently Amended) The <u>industrial disinfectant composition</u> method producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 34, wherein the R represents a normal octyl group.
- 37. (Previously presented) An industrial disinfectant composition comprising, as an effective component, a 2-alkyl-4-isothazoline-3-one represented by the formula (III),

which is obtained by reacting the compound represented by formula (II),

with chlorine as a chlorinating agent in dichloromethane as a solvent, in which hydrogen chloride is insoluble or exhibits low solubility, at a temperature of 39-41°C, according the reaction formula represented by:

filtrating a hydrochloride salt of the compound of formula (III) obtained from the reaction of the compound of formula II with chlorine, and

washing the hydrochloride salt with a solvent which is inert to the hydrochloride salt and in which the hydrochloride salt exhibits low solubility,

wherein R in the compounds of formulae (II) and (III) represents an alkyl group or aralkyl group of C1 to C8, and

wherein the amount of a 5-chloro-2-alkyl-4-isothiazoline-3-one contained in the 2-alkyl-4-isothiazoline-3-one produced is less than 0.1%.

38. (Currently Amended) The <u>industrial disinfectant composition</u> method producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 37, wherein the R represents a methyl group.

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39. (Currently Amended ) The <u>industrial disinfectant composition</u> <del>method</del> <del>producing a 2-alkyl-4-isothazoline-3-one</del> as defined in Claim 37, wherein the R represents a normal octyl group.